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ABSTRACT

According to the neo-Marxist critique, action researchers often neglect to take into account the historical, social, political, and cultural forces which silence students and protect the status quo in schools. One way to overcome this criticism is to link teacher research and emancipatory pedagogy, such as that advocated by Paulo Freire, in which both teachers and students collaboratively pose problems arising from real-life situations and, through questioning and reflection, pursue ways to solve the problems. Even if their actions are unsuccessful, students gain new knowledge and perspectives, and they learn to be critical in their thinking and actions. For example, a biology class raised questions about a toxic dump, located less than two miles from the school, which was not slated for local attention even though it was listed by the Environmental Protection Agency as hazardous and in need of immediate clean-up. Students generated questions and conducted research in which the interaction of science, society, and political and ethical decision making became evident to them. Action, such as a case study that can be made available to others, would evolve from the critical questioning and ensuing research. This example, as well as others, indicates that students can generate their own curriculum and be motivated to learn in the process. Through such collaboration, change toward more democratic schools becomes more likely. (JD)

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CREATING CURRICULUM TOGETHER:

TEACHERS, STUDENTS, AND COLLABORATIVE INVESTIGATION

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Paper presented as part of the symposium "Toward an Understanding of Teacher Research," at the annual meeting of the American Educational Research Association, Boston, MA, April, 1990.

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The expressions "teachers as researchers" and "action research" have recently become quite fashionable in educational circles. Teachers are increasingly being encouraged to act as social scientists in their classrooms by identifying problems they face as teachers, developing hypotheses which explain the problems, gathering and analyzing data, and hopefully adjusting their practice to reflect their new knowledge about the problems. But less talked about are [illegible] of the problems inherent in such research. The f[illegible] objective of this paper is to present an historical overview of action research, along with the most serious of the criticisms leveled against it.

The second objective of this paper is to address the neo-Marxist critique that action researchers all too often neglect to take into account the historical, social, political, and cultural forces which silence students and protect the status quo in schools. One way to overcome this criticism of teacher research is to link such research to emancipatory pedagogy through collaborative investigation of both teachers and students to solve problems in their worlds. The third objective of this paper is to present examples of this type of work drawn from the teaching of biology, and suggestions for future research and practice.

Action Research: Promises and Problems

History and Typology

The American sociologist Kurt Lewin is generally credited with developing the action research model. He sought to bring researchers and practitioners together in collaborative relationships to engage in a variety of applied research projects designed to address pressing social problems. Lewin wrote of the methodology to be used as "a spiral of steps, each of which is composed of a circle of planning, action and fact finding about the result of the action" (Lewin, 1948, p. 205). Through this approach Lewin sought to challenge and modify the traditional role of researchers and practitioners as separate groups and to increase the relevance and usefulness of research in helping to bring about social improvements (Simmons, 1984). In addition, involving practitioners in research about problems they had identified in their own work was intended to develop in them the knowledge, skills, and beliefs in their own effectiveness, ultimately in order to improve their practice and to solve problems in their own settings. Thus action research encourages change; Lewin strongly believed that "in order to gain insight into a process one must create a change and then observe its variable effects and new dynamics" (Marrow, 1969, p. 72).

Stephen Corey was the first to apply Lewin's action

research model to education, believing that "practitioners would be more likely to put professional researchers' findings into practice if these findings were used to inform the solution of work-related problems defined by the practitioners" (Wallace, 1987, p. 103). Like Lewin, Corey believed that the value of action research would be in the extent to which it fostered improved practice, and not necessarily the production of knowledge for public consumption.

As a result of Corey's work, educational action research enjoyed a decade of activity during the 1950's and then went into decline. Sanford (1970) attributed this to a growing separation of research and action, of theory from practice. According to the research-development-diffusion (RD and D) model, theorist-researchers create the ideas, and the engineer-practitioners put the ideas into practice. As social science research began to adopt the positivistic quantitative orientation of natural science research, qualitative action research work was disparaged as "not real research" (Hodgkinson, 1957).

Action research was revived in Britain with the work of Lawrence Stenhouse, who developed the idea of "teachers as researchers." Stenhouse (1975) wrote:

> Each classroom is a laboratory, each teacher a member of the scientific community....The outstanding characteristic of the extended professional is capacity for autonomous professional self-development through systematic self-study, through the study of the work of other teachers, and through the testing of ideas by

classroom research procedures (p. 187).

Stenhouse believed that the curriculum provides a means of studying the problems and effects of educational theories, as it functions as the medium through which educational ideas are tested and developed. Practitioners, through a critique of curriculum and instruction, could thus increase their understanding of their work and improve their teaching (McKernan, 1988).

John Elliott and Clem Adelman based an action research project they conducted in the mid-1970's in Britain (the Ford Teaching Project) on Stenhouse's views. Their aim was to enable teachers through action research "to contribute (not only) to an understanding and solution of the practical problems faced by teachers, (but also) to the development of a theory of teaching" (Elliott & Adelman, 1976, p. 7). Since then, Elliott (1983, 1985) has developed a justification for educational action research which borrows from Stenhouse's more general work in epistemology and pedagogy. Elliott views teaching as a "moral science," in which teachers' "personal theory" about their professional practice reveals their educational values. However, this theory may in fact be contradicted by teachers' actions in the classroom or school. According to Elliott, through action research teachers collaborate in evaluating their practice in order to develop an awareness of their own personal theory, as well to share and perhaps connect their

theory with those of other teachers. They subsequently experiment with new methods or strategies in order to achieve a greater match between their theory and practice. The end result is documentation of their work in a form accessible to other teachers, through which a shard theory of teaching through the research of practice is developed. Examples of such work abound in Britain; two of the best known publications are Nixon's A Teachers' Guide to Action Research (1981), and Hustler et al.'s Action Research in Classrooms and Schools (1986).

One relatively common problem action researchers have addressed is how teacher practice may act to prevent discovery or inquiry learning from taking place. In Australia, John Henry (1985; cited in Carr & Kemmis, 1986) has explored this issue in science classes using a case study approach typifying much action research. Teachers scrutinized transcripts of their classroom interactions, and discovered how the practices of lecture and closed questioning actually prevented students from developing independence of the teacher in their learning. The teachers not only learned to change the form of their questioning, but they also changed the way they regarded the purpose of questioning. Questioning is not merely a matter of assessing student knowledge; it also acts to create or deny opportunities for students to be actively engaged in learning. As the teachers grew to realize this, they acted

to change the physical and social set-up of their classrooms, with the goal of encouraging more independent student inquiries and input. In this and many other cases of action research in both Britain and Australia, Lewin's self-reflective spiral of planning, action, fact-finding and evaluation have been employed to effect substantive change in the educational practices of the teachers involved.

It is clear that such results from action research may not be universally embraced by teachers or administrators. For action research to be successful, teachers must have a high degree of autonomy in the classroom (Elliott & Adelman, 1976; Stenhouse, 1975) and, some would argue, significant input in the school and larger educational community as well. Obviously this is not always, or even often, the case. Teachers too often have little say in decision making at the school or district level. These concerns led Wilfred Carr and Stephen Kemmis (1986) to articulate a form of action research called by them <u>emancipatory</u> action research, in which

> the practitioner group takes joint responsibility for the development of practice, understandings and situations, and sees these as socially-constructed in the interactive processes of educational life. It does not treat teacher responsibility for classroom interaction as an individual matter, but, on the contrary, takes the view that the character of classroom interaction is also a matter for school determination and decision-making....The critical impulse of emancipatory action research towards the transformation of educational institutions is expressed not only in individual critical thinking but in the common critical enterprise of changing selves in order to change the institutions those selves generate through their joint

> practices of communication, decision-making, work and social action....The notion (is) that the double dialectic of theory/practice and individual/institution is at the theoretical core of emancipatory action research (p. 203).

The central role that communication plays in the model for emancipatory action research proposed by Carr & Kemmis borrows heavily from the work of Habermas and his "ideal speech situation" (ISS). The ISS can occur only in a "group" or "community," where the participants arrive at truth by consensus. This process of emancipation involves "critical self-reflection on conditions of action by people who engage in dialogue as equal and autonomous partners" (Wallace, 1987, p. 108). Enlightenment achieved through this process is, according to Carr & Kemmis, empowering because it engages participants "in the struggle for more rational, just, democratic and fulfilling forms of education" (1986, p. 205). Such rhetoric, along with the linkage of theory with practice and the importance of dialectic engagement, clearly places Carr & Kemmis' emancipatory action research alongside the work of the Frankfurt School critical theorists, Henry Giroux, and Paulo Freire.

Another important distinction between the action research model proposed by Carr & Kemmis and more mainstream action research is the former's focus on a societal analysis of problems, compared to the latter's focus on an individual or group analysis. This does not mean, as implied in the

Carr & Kemmis quote cited earlier, that mainstream action research does not address institutional problems, but rather that when it does, it is with an ideology that emphasizes the "centrality of individuals, the importance of efficient and effective task accomplishment, and 'consensus' social theories marked by attention to common values, social integration, and incremental social reform" (Brown & Tandon, 1983, p. 279). Emancipatory action research, on the other hand, calls into question the relationship between the institution and society, critically examining and working to change the underlying forces and values which promote inequality and oppression . Again this is in line with critical theory, which tends to view society in conflict and struggle between "have" and "have-not" groups, and believes that a critical examination of this conflict is essential in order to challenge it.

It is important to note that conceptions of emancipatory action research are not limited to the Carr & Kemmis model. Stenhouse himself, in Authority, Education, and Emancipation (1983) argued that the "teacher-researcher role is the route to emancipation, since it eschews the authority or expert role in favor of the belief that knowledge is provisional and tentative" (McKernan, 1988, p. 186). With emancipation, teachers can act to take control of their curriculum, since it (according to Stenhouse) is the medium through which knowledge is communicated. Although Stenhouse's work lacks

the "changing the world" rhetoric of the critical theorists, it provides an important theoretical link between control of knowledge and emancipatory education (which will be explored later).

Yet another notion of emancipatory action research is what Brown & Tandon (1983) call "participatory research". Based on the work of Paulo Freire, it has been defined as

> an integrated activity that combines social investigation, educational work, and action...some of the characteristics of the process include:
> -the problem originates in the community or workplace;
> -the ultimate goal...is fundamental structural transformation and the improvement of the lives of those involved;
> -the community or workplace (is involved) in the control of the entire process (Hall, 1981, p. 7).

Brown & Tandon have noted that this form of research is much more common in third world countries than in developed countries, whereas the reverse is true for action research. They believe this is because the ideology of participatory research (questioning the legitimacy of authority, commitment to social change) is more salient in countries in which poverty, conflict, and oppression are commonplace. They argue that "action researchers work best in client systems that have a consensus - or at least no overt conflict - about goals and values" (Brown & Tandon, 1983; p. 291), whereas participatory researchers are more successful when there is conflict between social groups, an imbalance of power, and a commitment to ending the inequality which exists. This argument is particularly relevant to the

forthcoming critique of the various forms of action research.

A Few Problems

Criticisms of action research have varied with the times; during the 1960's and 1970's action research was assailed for its lack of "scientific rigor," meaning lack of controlled testing and quantitative methodology; now, in the "postpositivist" 1980's and 1990's (Lather, 1988), qualitative ethnographies are in vogue, which may partially explain the resurgence of action research and its reliance on case studies. But more substantive criticisms have recently emerged, including concern about the generalizability of action research (Simmons, 1984); the lack of interest in or knowledge of concepts from the disciplines which may provide alternative perspectives for teachers' reflections on their practice (Blake, 1986) or which may help them avoid "reinventing the wheel" (Bell, 1982); and the possibility that teachers may not achieve awareness of all the assumptions which guide their practice through individual or even group reflection alone (Al-Khalifa, 1985). An even more disturbing criticism comes from an analysis of the ideological assumptions of action research; in situations "riddled with distrust and conflicts of interest...action research may fail...(because) consensus solutions are much more difficult to achieve when the legitimacy of current distributions of power and resources

is challenged and when solutions that benefit one party are rejected by others" (Brown & Tandon, 1983, p. 289). In other words, when those who hold power feel threatened by the activities of action researchers, they are much less likely to cooperate in facilitating change. Such remarks lend credence to Carr & Kemmis' belief that schooling not only serves educational purposes, but also "particular social interests and the institutionalized self-interests of particular groups" (1986, p. 207). For action researchers to pursue change in an ahistorical, apolitical context seems naive. Yet Carr & Kemmis have also been accused of being naive, as well as militant, utopian, ideological, and elitist (Gibson, 1985; McKernan, 1988). These criticisms are quite similar to those levelled against critical theory, the primary point being that their language is alienating rather than appealing to practitioners. "We would be more confident if the theory was developed by, and grounded in, the language and interpretive categories of practitioners," says McKernan (1988, p. 198). He also chides Carr & Kemmis for endorsing a "particular political belief system" and insists that action research should concentrate on curriculum, instruction, and pedagogy "rather than the missionary and utopian ideals of changing the practices of the society and culture to make them more rational and just" (p. 199). Gibson (1985) more harshly criticizes their implicit belief that critical theory is superior to other

theory, and their uncritical acceptance of Habermas' belief in universal consensus through discourse. People disagree, and even when they do agree, the result may not be "truth." He also rebukes Carr & Kemmis for not distinguishing "levels of explanation" within which teachers can reasonably be expected to engage in emancipatory action research (1986, p. 171). Level One (the teacher's classroom) is the only place Gibson believes such work can occur easily; at Levels Two (the school) and Three (structural) emancipatory endeavors are much more dependent on collective action.

Most of the criticisms outlined above, both of traditional and emancipatory action research, are both valid and troubling. We do not live in a society in which decisions are made freely, out of context and without pressure from those more powerful than us. Our society is not a critical one in which power relations are commonly challenged and questioned; however, the overwhelming passive resistance among students and teachers in schools, and citizens in general (demonstrated by, among other things, low voter turnout in elections) indicates widespread dissatisfaction with the status quo. I believe that critical theory speaks to this dissatisfaction and provides a framework within which it can be challenged; but it requires an intervention that empowers its participants, unites theory and practice, and struggles for structural, rather than piecemeal change. I believe that emancipatory

action research can link theory and praxis; but that it must do this by incorporating the needs of the population that education is supposed to serve: its students. In the next section of this paper I will show how emancipatory action research might be reformulated to address some of the above criticisms by incorporating ideas from the participatory research model, which argue for the involvement of all disenfranchised groups in schools.

Creating Praxis Through Collaborative Investigation

Learning By Doing

> Gardening...need not be taught for the sake of preparing future gardeners, or as an agreeable way of passing time. It affords an avenue of approach to knowledge of the place farming and horticulture have had in the history of the race and which they occupy in present social organization. Carried on in an environment educationally controlled, they are means for making a study of the facts of growth, the chemistry of soil, the role of light, air and moisture...(Dewey, 1966, p. 200)

It is particularly illuminating to outline a practice-based critical theory by beginning with these words from Dewey, as they demonstrate that "learning by doing" does not imply a devaluation of theoretical knowledge in favor of the practical. Dewey's claim was that transmitting theory apart from practice reduced the student (or the teacher) to the side of experience he referred to as "undergoing;" a passive object of education. Instead he preferred to stress the "active" side; not just undergoing a specific event (such as what are commonly called

"laboratories" in science classes), but understanding the consequences of what has been undergone, for reflective experience to come into play (McLaren, 1989). Thus the aim of education for Dewey is to help the student gain conscious direction and control of the learning process, and similarly, to enable the teacher to gain direction and control of the teaching process.

> Education in order to accomplish its ends both for the individual learner and for society must be based upon experience - which is always the actual life-experience of (the) individual (Dewey, 1938, p. 89)

Education, grounded in the life-experiences of the individual, illuminated by a practice-based theory: these beliefs of Dewey, accompanied with his goal of realizing the promise of democratic power through the vehicle of education, provide a framework within which it is possible to conceptualize a practice-based critical theory.

Learning What?

What is missing from the above framework is a conception of knowledge which Dewey only hints at in how he describes one way of teaching gardening. What Dewey speaks to is the interrelatedness and contextual nature of knowledge; but he also implies that what is learned can be used in empowering, as well as in neutral or even alienating ways. Stenhouse's views of knowledge are particularly useful here, as he believed all knowledge (and especially curriculum) is intrinsically problematic and should be critically questioned and judged by those who are asked to study or use

it (Elliott, 1983). I propose that the generation of knowledge via research is equally problematic, and should also be questioned and judged just as critically.

But what of the nature of the knowledge to be taught, learned, or researched? And what is the purpose of teaching, learning, or generating that knowledge? These questions, when asked critically, empower the participants - students and teachers - to challenge basic assumptions which underlie education today. As Freire has stated (1970, 1973), education is not neutral, and does not take place in a vacuum. People bring with them their cultural expectations, their social struggles, and their survival strengths to their jobs and their classrooms. Education which assumes a construction of knowledge from the learner's experiences acts either to reinforce or challenge existing social forces that keep students passive and uncritical. These historical, social, political, and cultural contexts to knowledge must be confronted and decoded. In Freire's view, the choice is clear: education must be for liberation, based on praxis, and unabashedly "utopian." As Lather puts it:

> For praxis to be possible, not only must theory illuminate the lived experience of progressive social groups; it must also be illuminated by their struggles. Theory adequate to the task of changing the world must be open-ended, nondogmatic, informing, and grounded in the circumstances of everyday life; and moreover, it must be premised on a deep respect for the intellectual and political capacities of the dispossessed (1986, p. 262).

Critical Education, Group Investigation and Communication

Knowledge is meaningful and education is liberatory when, according to Freire (1970), the learners generate, explore, and challenge the ideas and experiences which give meaning to their lives. These "generative themes" are posed as problems, revealing the interconnections and complexities of real-life situations where "often, problems are not solved, only a better understanding of their nature may be possible" (Conolly, 1981, p. 73). Problem-posing must occur dialectically, with students in dialogue and co-investigation with the teachers. The teachers, while not "experts" depositing knowledge in the minds of their students as in Freire's notion of banking, do however listen to the students, help them organize and present problems which challenge their perceptions, and also suggest potential generative themes. Freire's remarks concerning the role of teachers are important:

> The opposite of manipulation is not an illusory neutrality, neither is it an illusory spontaneity. The opposite of being directive is not being non-directive - that is likewise an illusion. The opposite both of manipulation and spontaneity is critical and democratic participation by the learners in the act of knowing, of which they are the subjects (1981, p. 28).

How might such problem-posing critical education take place in a classroom? I propose that a form of action research be implemented for students (as well as for teachers), which begins by acknowledging the tentative, problematic nature of the curriculum (and the knowledge upon

which it is supposedly based). This could begin by posing the simple questions, "What in (this subject area) is worth knowing?", followed by "How do we know it?" An alternative to asking these questions initially is to brainstorm generative themes, which could be focused on particular problems in the subject area as they relate to students' lives. Once generative themes are agreed upon, a method for investigating them becomes critical. Problem-posing content within a traditional didactic "banking" method of teaching is counterproductive, and no less oppressive than the traditional content-based curriculum taught in a student-centered way. I have used the "group investigation model" (Sharan, 1980) as a framework for a student-centered method of teaching, which is a cooperative learning method of group research that gives students joint choice and control over what they investigate. This, of course, is not enough for a method to be critical, action-based, and liberatory; the curriculum must not only be situated in the students' experiences, but must also be dialectical, questioning, reflective, and, most importantly, linked to action. Wallerstein notes that

> Action for students means learning to see themselves as social and political beings, with rights to access to the political systems in their workplaces or their cities. Plans for action evolve from students understanding the immediate and root causes of problems, as well as having visions of better conditions (1987, p. 42).

Regardless of the level of action taken, students learn

through the experience of action itself, that people can effectively interact and struggle to transform their reality. Even if their actions are unsuccessful, students can gain new knowledge and perspectives to try another strategy.

A Few Examples

The high school biology students of a colleague of mine were unaware of a toxic dump located less than two miles from the school, which was listed by the Environmental Protection Agency as a hazardous site in need of immediate clean-up. But it was not on the list to be cleaned up, according to the local paper. When this information was brought to their attention, her students wanted to know more about this problem. So she helped them to generate the following questions: What is the problem? How can this problem be defined scientifically, historically, and politically? Whose interests are being served in maintaining this situation as it is? What should be done in the interests of the betterment of society? What can we do to help change this situation? The students formed groups around these and other problems and questions, and launched their own investigations. Not only was "science" actively discovered by the students' researching, designing and conducting their own experiments, but the interaction of science, society, and political and ethical decision-making was forcefully driven home to them through their

investigation of the issues surrounding the non-action by the EPA. Group decisions on what and how to investigate the problems were made consensually, with a conscious effort to incorporate reflection at each stage in the process of discovery. Although it did not happen in this case, the students could have put together their results in a form accessible to others, perhaps as a "case study" of the types of research students can do in their classrooms. Such education through knowledge-generation combines Dewey's "learning by doing," Freire's "problem-posing," and the many types of action and participatory research in an exciting and critical way.

Another example of such an approach to learning is a course in ecology taught by a teacher who firmly believes that "you can't teach kids anything - they choose to learn and what you do is provide the opportunities for them to do so." At the beginning of the year the students meet and elect a governing board for each class, which makes all decisions concerning curriculum, field trips and other extracurricular activities, and class rules. The teacher acts as an advisor and resource person, providing students with guidance and support. For several weeks the students meet in groups to decide which issues are most important, not just to them but to their community and the world. They then prioritize and vote on the issues they would like to address in class during the year. After making these

decisions, they work together to gather information in the library and the community about their issues, present it to the class, and decide on what action to take to either increase awareness about the issue or to help resolve it. This work has led to student-initiated and run trips to environmental organizations, peaceful protests against local polluters and arms manufacturers, fundraising to support work on environmental issues, active involvement in planning local and state-wide Earth Day events, and feelings of involvement and empowerment among the students.

In my interviews with these students, I was struck at how excited and motivated these "low-achievers" were about their work in this course. One student stated, with the enthusiastic agreement of other members of the class, "We learn (in this class) that if we stand up for something, people will listen to us. We have the right to say what we want to, even though we're kids." Other comments included, "Learning matters if you can use what you learn to make a difference," and "Everybody can be a teacher - we all have something to share and learn from each other...(our teacher) learns from us and admits it, just as we learn from him. We're in this class together, teaching and learning together."

These above examples clearly demonstrate how students can in fact generate their own curriculum, and become highly motivated to learn in the process. The teachers, as

co-researchers, are an integral part of this process. At Level One - the classroom (Gibson, 1986), such collaborative investigation can provide emancipation and empowerment of both the teachers and the students. At Level Two - the institutional - the constraints on emancipation become stronger. The questions for critical action researcher/practitioners to ask themselves are; "How, through collective action, can school ethos, structure and procedures promote rather than inhibit freedom, and how can the organization and evaluation of schooling enable teachers and students to gain greater control over their lives" (Gibson, 1986, p. 171)?

Elliott, in Stenhouse's Curriculum Research and Development in Action (1980), provided an example of science teachers working collectively to change curriculum at Level Two. The questions they began with were, "What kind of science is right for children?"; "What do we want them to achieve through learning about science?"; and "How can we best help them achieve it?" These are valuable questions for all teachers to ask, but need to be examined far more critically. For example; does "right" in the first sentence mean "relevant"? Which children are being discussed, and what are their backgrounds, previous experiences, class, race, and gender, and how do all of these affect their performance in science? A critical perspective would examine what is important for these children to know about

science, what are the obstacles which prevent them from learning these things, and how the obstacles can be overcome. Asking these questions more critically empowers the students as well as the teachers.

Gibson's Level Three (structural) is far less accessible to collective action. Just as we are 'born into language' (and so have little choice in what to speak), "so too we are born into history, society, ideology. Our beliefs, especially our 'common sense', are largely 'given' to us" (Gibson, 1986, p. 171). But these beliefs are not neutral, objective, universal, natural, or classless, nor are they immutable. Critical educational theorist/researcher/ practitioners are aware of this structural shaping of experience, and challenge it when appropriate. Through an emerging critical, collaborative dialectic among teachers and students that is action-based, significant structural change toward more participatory, democratic schools and thus an increasingly democratic society becomes more likely.

Conclusion: Toward a Socially Critical School

The model I have proposed above, action-based collaborative investigations into the nature of knowledge, curriculum, and structure in the schools, is admittedly a problematic and incomplete one. There are sizeable obstacles in the way of teachers interested in

problem-posing education for their students and for themselves. Teachers are overworked, isolated, seen as technicians who merely carry out textbook publishers' curricular plans, and perceive themselves as powerless; students are bored, apathetic, and alienated from schools and curricula which do not speak to their life experiences and reproduce social and cultural inequality. Critical theory, despite its problems with language and accessibility, can serve as a framework within which schools can be viewed as social sites which are microcosms of the struggles of the larger society. Action research, despite its "operating from an ahistorical, apolitical value system" (Lather, 1986, p. 263), can be enriched by critical theory's emphasis on social, cultural, political, and historical contexts of struggle and change, and provides a model for teachers and students to work for change in the schools.

Kemmis et al. (1983) provide a model of what a school embodying the principles of critical theory and action-based research might look like. The "socially critical school" will be heterogeneous (mixed ability, social classes, races, ages), with much project and group work that is action-based in informal settings, both in and out of school boundaries. Through critical discourse, subjects of study will be negotiated, problematized and situated in the lives of the students. Inequalities, injustices, and models for change will be critically analyzed, and acted and reflected on.

To some critics, the model of the socially critical school sounds too idealistic and utopian to be possible. There may be some truth to these claims; we do not live in an ideal world, and schools are complex social structures highly resistant to change. But it is equally true that a vision of what schools could be is desperately needed. As Goodlad has unequivocally stated:

> American schools are in trouble. In fact, the problems of schooling are of such crippling proportions that many schools may not survive. It is possible that our entire public education system is nearing collapse (1984, p. 1)

It is time for a radical alternative to be proposed, one which treats knowledge as problematic, and teachers and students as active, critical, struggling actors and actresses on a very difficult, yet promising, stage.

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